STATE OF MAINE

Board of Registration for Professional Engineers

Spring Newsletter 2005



Ralph F. Sweet, P.E. (left), Chairman, presents Dr. Wayne H. Hamilton, P.E. with a plaque recognizing his many years of dedicated service to the Maine Board.

Members of the Board

Ralph F. Sweet, P.E., Chair
John E. Dority, P.E., vice Chair
Dr. Wayne A. Hamilton, P.E.
Stephen W. Cole, P.E.
Charles J. Behounek, P.E.
Kathy Gustin Williams, P.E.
Paula M. Hamilton, Public Member
Staff
Warren T. Foster, P.E., Exec. Director
Beatrice M. Labbe, Admin. Office Mgr.
Marilyn Condon, Board Clerk

In This Issue:

Dr. Wayne Hamilton, PE.....Pg. 2 & 3
What's Happening......Pg. 3 & 4
Promoting Our Profession.....Pg. 5
Engineering Ethics 101......Pg. 6 & 7
214 Days Until Renewal.....Pg. 7 & 8
PDH Activity Log......Pg. 9

E-mail: pengineers@prexar.com & warrentfoster@link2usa.com Phone:207-287-3236 Fax:207-626-2309

NEW WEB SITE: www.maine.gov/professionalengineers/

Wayne A. Hamilton, PE Member of the Board since October 1988

It was the summer of 1988; Ed Morrison called me one day and asked me if I would be willing to serve on the State Board of Registration for Professional Engineers, to replace Walter Turner who had served for fourteen years. He was representing the Consulting Engineers of Maine who had been asked to submit a nominee. Assuming that it would be for one five year term I agreed to permit my name to be sent to the Governor. In October of 1988 Governor McKernan appointed me to the Board. He reappointed me to a second term in 1993 and Governor King appointed me to a third term in 1998. So much for one five year term. My third term was to end in October 2003 but as a member of the Board you serve until your replacement is named; so far Governor Baldacci has not named my replacement.

I served as Chairman of the Board during the years 1999 and 2000. That was the year that we made major changes in the registration law. In order to make these changes we needed approval of the State Legislature. This means public hearings before a joint committee of the Senate and House committee members and approval by both the House and the Senate. Since I had a significant input into these revisions and I was invited to the Governor's office along with Herb Doten, who was our Board Secretary at the time, for the signing of the bill. In addition to the revised law over the past few years we have implemented the addition of Professional Development Hours as a requirement for license renewal. This required a rewriting of our "Rules". The entire process of updating the "Law" and the "Rules" is a never-ending process. By the time changes are approved, the Board has made a list of additional changes needed for clarification of the existing "Law or Rules". Over the sixteen plus years that I have served on the Board I have spent more time on the "Law and the Rules" than on any other item.

The appointment to the State Board opened up another interesting area for me. As a result of being a member of the Board I have become involved with the national committee that writes the Fundamental Examinations (FE exam) for graduating engineering students. The process of writing questions, checking and then checking once again so that there can be no misinterpretation of the question has been a great experience. It is the contacts and interaction with other engineers around the country that has been most rewarding. We meet at Clemson, SC four times a year so that you get to know one another fairly well. With the today's e-mail we are able to communicate with each other at any time almost instantly. Serving on a national forum one soon finds out that problems confronting the Board are not unique to Maine. All Boards are faced with questions of complaints from the public, unlicensed practice, continuing education, industrial exemptions, and selling the idea of Professional Registration to our seniors in College.

Serving on the Board has been a very special experience for me. It has enabled me to encounter first hand the demands on all fields of the Engineering profession. As a member of the Faculty at the University of Maine one can become isolated from the profession. The Board, representing all fields of Engineering, brings to light the meaning of "working in the trenches" to make things complete in order to provide a finished product for our clients and to point out the true meaning of Law; safeguarding of life, health or property for the public's concern.

Editor's Note: Although the Board hopes that Governor Baldacci will soon appoint a successor to Dr. Hamilton, we know that it will be very difficult to find a replacement. An exemplary Board member and former chairman, Wayne has conscientiously and

capably served the engineering profession in this capacity while simultaneously guiding future engineers in their engineering educational pursuits at Orono. We are grateful for the positive impact his work has had on our engineering profession in Maine and beyond. We wish him well in this retirement and future endeavors.

WHAT'S HAPPENING?

By: Ralph F. Sweet, PE, Chairman

INITIAL AND CONTINUING EDUCATION:

It is becoming a national concern that engineers graduating today have reduced skill levels compared to the graduates of 20 years ago. This is thought to be caused by a 10% reduction in credit hour requirements and the reduction in core engineering courses being required for graduation over this period. Technical and professional organizations concerned with Professional Engineering excellence on a national level are coming to the conclusion that the licensing structure must change to require at least 30 college level engineering courses be taken after the 4-year degree before an engineer will be allowed to function in a manner similar to those with PE licenses today.

COMITY:

There are 6,000 Professional Engineers licensed by the PE Board to practice engineering in Maine. Of that 6,000, only 2,000 are Maine residents. This situation raises some questions. Why are so many Maine projects being designed by out-of-state engineers? When out-of-state engineers request licensure in Maine they must meet the Maine PE Board's continuing education requirements, which so far has not been a problem. However, when Maine engineers apply for licensure in some other states there can be problems if the other state has requirements for some continuing education credits that must be taken within that state. Check out the continuing education requirements in detail before applying for a license to practice by comity.

BUILDING COMMISSIONING:

I have heard stated at lectures, read advertising brochures and seen newspaper articles on several occasions that are intended to promote building commissioning. There is a very disturbing theme presented in most of these presentations. The promoters of building commissioning are stating in subtle ways that engineers are not paying attention to design details the way they used to because of reduced fees. The promoters of building commissioning claim to have adequate backup data to support their argument. Please be aware that the PE Board can revoke a license based on gross negligence and that an attempted defense based on lack of sufficient fee to provide a satisfactory design will fail.

ENGINEERING DATA VS. SALES HYPE:

There have been two interesting articles in recent engineering journals that I would like to summarize here for the benefit of anyone that missed them. It was claimed that in marketing products to engineers, there is a growing trend to make advertising material look like unbiased engineering data developed by a test lab whether it's delivered on

paper, in person, or over the internet. The warning in the articles was that sales hype is not engineering data and relying solely on sales hype for design decisions is risky at best.

NAME CHANGE:

Depending on the outcome of proposed legislation, the board of REGISTRATION may change its name to the board of LICENSURE. There is a subtle distinction between "registration" (a name on a list) and "licensure" (the granting of permission to do something). There will be no requirement to change your stamp from one stating registration to one stating licensure if the proposed legislation is passed.

PROJECT RESPONSIBILITY:

The board requested that the National Council of Examiners for Engineers and Surveyors consider forming a committee to create a position paper on the proposal to require the engineer that stamps engineering documents also sign a letter at the completion of the construction of that project stating that the project was constructed in accordance with the design documents. At first glance this requirement might seem impossible at best and not uninsurable at worst. To the contrary, initial inquiries into this requirement have shown that it is possible and it is insurable. Some other states already have this requirement.

COMPLIANCE WITH THE LAW:

Board members have spoken at Code Enforcement Officers' (CEOs) meetings, building inspectors' meetings, state required inspector training classes, and written to planning boards and other plan reviewing officials. The board's pitch in these speeches is that engineering documents having to do with public welfare or the safeguarding of life, health, or property must be signed, dated, and stamped. The board is now considering sending a questionnaire to Code Enforcement Officers and other plan and design review agencies to determine if the board's efforts have been effective. If you have ideas about how we can better protect the public, please call the board office at 207-287-3236.

Promoting Our Profession By: Stephen W. Cole, P.E.

Does the public know what engineers do? Do engineers know what other engineers are doing?

The answer to both questions is: although our profession is well respected, people have little understanding of the scope of work undertaken by engineers and little understanding of the impact engineers have had on our standard of living. We do important, good work but are too humble or too involved in our next project to take credit for our successes.

More than 30 years ago, Engineers Week was started at the national level to help promote the engineering profession. This effort was adopted in Maine and has had some success, probably most notable the Engineers Week supplements in major newspapers statewide. About 5 years ago, the Maine Engineering Promotion Council (MEPC) was formed to try to improve on the Engineers Week effort. MEPC has worked to improve the news supplements, developed and run TV ads and provided an outreach focused toward middle and high school students. This has resulted in an Engineering Expo that demonstrates what engineers do and gives young people an opportunity to interact with real engineers in a hands-on environment. This program has alternated between the Portland area and the Bangor area and has had in excess of 500 students and parents in attendance each year.

In 2005, MEPC undertook the creation of a Speakers Bureau to provide another opportunity to inform the public about the work of engineers. A Power Point presentation has been developed which briefly highlights the wide array of engineering disciplines and the common and not so common things that the public now takes for granted for which engineers are responsible. This presentation is available on disc to anyone who would like to utilize it.

The Speakers Bureau effort, while very new, has met with some success. We have had a few engineers speaking before business/social clubs and the feedback has been that both the speakers (engineers) and the audience found it worthwhile. If you wish to assist with the Speakers Bureau (be a speaker or know of a speaking opportunity) or can assist MEPC in their efforts, please contact MEPC at info@engineeringme.com.

Please consider helping promote and improve our profession.

Engineering Ethics 101 By: Warren T. Foster, P.E., Executive Director

All of us are faced with the challenge of how to fulfill our commitment of 30 Professional Development Hours (PDH) in Continuous Education. As an engineer who is no longer attached to a large organization, I found the accessibility to PDH credits a bit more difficult than it might have been at one time.

After becoming the Secretary of the Board of Registration for Professional Engineers in May of 2004, I wrote an article entitled "Continuing Professional Education (CPE) Requirements" in our MBRPE fall newsletter. Faced with the commitment of completing 30 PDH before December 31, 2005, I re-read that article to apply it to my own situation.

The article stated "Engineers are encouraged to select meaningful CPE activities that will benefit them in their chosen fields." It further recommended "any qualifying course or activity with a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's field of practice".

After reviewing and considering some of the available courses, I found one that met my needs. At this point in my professional engineering career, what could be better to meet these criteria than a course in Engineering Ethics?

I enrolled in a correspondence course in Basic Level Study in Engineering Ethics and Professionalism offered by Texas Tech University. This course was worth 20 PDH's. I completed this course at home, sending in my assignments and receiving critiques and grades via email. After completing all the regular reading and writing assignments, I received a comprehensive and reasonable open book final exam. Although this course required well over 20 hours for me to complete, someone more proficient in writing could have completed it in 20 hours.

Not only was this course very worthwhile for me, it was also an eye opener! Throughout our engineering careers, we are faced with many ethical decisions. I had not previously thought of these decisions as they relate to ethics but rather as relating to cost effectiveness, pros v cons, safety issues, environmental concerns, and life cycle cost.

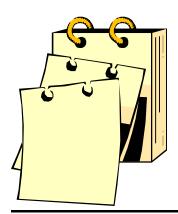
This past February, I was fortunate enough to have the opportunity to attend the two-day annual meeting of the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB) in Fredericton, New Brunswick. The theme of this meeting was "The Economics of Ethics", a very compatible topic to the course I was enrolled in! The meeting included an "Ethical Workshop" activity as well as presentations by several thought-provoking speakers.

As the APEGNB brochure stated, "The world has changed greatly and ethics has become a pivotal hot topic in the classroom and the boardroom. A lack of ethics has brought down corporations. Ethics influence how technology is created and used. So, how do we as professionals respond to the difficult ethical challenges? How do engineers balance their professional code of ethics while acting in the best interests of their employer and the public?"

The experience of an ethics course combined with an ethics conference has given me a better understanding of how engineering ethics is an integral aspect of decisions that practicing engineers must continuously make. When engineers make a decision, they must weigh the decision based on its effects on public health, safety, and welfare.

Engineering ethics entails doing what is right for yourself, your employer, your client, and your profession as well as for the greater community.

I encourage any of you who have not taken a course in Engineering Ethics to consider this as a possibility for fulfilling part or all of your PDH's for a two-year period.



214 DAYS UNTIL RENEWAL

DEADLINE

By Kathy Gustin Williams, PE, Chair Continuing Professional Development Committee

On June 1st there will be 214 days until the PE License Renewal Deadline of December 31st, 2005. It's time for a check- up of where you stand in meeting the Mandatory Continuing Professional Education Requirements.

A copy of a Continuing Professional Development Activity Form is included in this newsletter and will be available on the Maine PE Board Website. The log is intended to be a bookkeeping and organizational device. With your log you'll want to keep backup information such as PDH Certificates, Seminar or Course Descriptions, Receipts etc. in case you are audited.

CHECK - UP

The first step in your check-up should be a review of your records for 2002 - 2003. At that time the State of Maine had in place a Voluntary Continuing Professional Education Program. Any PDH's in excess of 30 earned under the Voluntary Program (2002-2003) up to a maximum of 15 PDH's can be carried forward to the Mandatory Program (2004-2005). The requirements for the Mandatory program are slightly stricter then the Voluntary Program, so if you weren't keeping track, anything that qualifies for the Mandatory Program would qualify for the Voluntary Program. When you total them up, any PDH's over 30 PDH's can be carried forward to the next renewal period (2006-2007) up to a maximum of 15 PDH's.

STILL TIME

With more than 6 months until renewal there is still time to earn the required professional development hours necessary to satisfy the Mandatory Continuing Professional Education Program Requirements.

RENEWAL

Although the fine points are still under development, the Board expects the Mandatory Continuing Professional Education information required for renewal to look like this. Remember you can also renew online.

Name	Maine PE Number
Mandatory Continuing Professional Education	
PDH's Carried forward from 2002-2003 (max 15 PPDH's Earned 2004-2005 Total PDH's PDH's Carried forward to 2006-2007 (max 15 PDH)	<u></u>
I hereby certify that the above list of PDH's is an ac Development Activities required for license renewal	curate record of my biennial Continuing Professional I.
Signature	_
EXEMPTIONS	
Name	Maine PE Number
I am requesting an Exemption from Continuing Prof $\hat{\mathbf{I}}$ Retired	fessional Education Requirements due to:
Armed Forces Reference: M.R.S.A., Title 32, Cha Orders)	
License Issued for less then full 2-year renewal pe Regulations Chapter 2 Section 12 Paragraph 4g.	riod. Prorate Required PDH's Reference: Rules and
Extenuating Situation, Hardship, or Disability. R	eference: M.R.S.A., Title 32, Chapter 19, Subchapter
III, § 1362 paragraph 4 (based on adoption of L.D. 1 request, PDH Log and PDH Supporting Documentar	548) Submit request, supporting documentation for

AUDIT

The Maine PE Board expects to randomly audit a minimum of 1% of Licensees. With roster of approximately 6000, that would amount to about 60 people. We plan to generate a list of random numbers that will be matched against active PE numbers. Those people will be audited. We anticipate notifying those selected for random audit in batches after the renewals and late renewals have come in (after March 31, 2006). The Licensee would need to submit their log with supporting documentation (PDH Certificates etc.) for hours claimed.

The following Licensees would also be audited:

- Applying for a Full or Partial Exemption due to Extenuating Situation, Hardship, or Disability,
- Change from Retired to Active Status,
- Change from Inactive to Active Status

FOR THE PERIOD	PE Number
From: To:	
Page No of	Name:

State of Maine

Continuing Professional Development - Activity Log

	Date(s) Or Date Range	Name of Activity and Sponsoring Organization Location and Speaker/Instructor (As Applicable)	PDH'S For This Activity	Cum. PDH's For This Period
		Carryover From Previous Period (max 15 PDH)		
		Carryover To Next Period (max 15 PDH)		
L		Carryover 10 Next Letton (max 13 LDH)		l

Certification

Signature

I hereby certify that the summary of credits is true and correct and states accurately those PDH's that I have
earned during the stated period.

Date

Note: The State of Maine Requires a minimum of 30 PDH per biennium. Please attach supporting documentation if audited.

Reference: Requirements for Continuing Professional Development can be found in M.R.S.A., Title 32, Chapter 19 Subchapter III, Section 1362, and Rules and Regulations Chapter 2, Section 12.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS 92 STATE HOUSE STATION AUGUSTA, MAINE 04333-0092 PRESORT FIRST-CLASS US. POSTAGE PAID PERMIT NO. 8 AUGUSTA, ME

ADDRESS SERVICE REQUESTED